

UDC 711

G.E. Karepov, S.R. Lipovtseva*Institute of Architecture and Design, Siberian Federal University.**Russian Federation, Krasnoyarsk, Svobodny 79, 660041**e-mail: g.karepov@mail.ru, sofiya.lipovtseva@mail.ru*

SMALL ARCHITECTURAL FORMS IN THE ORGANIZATION OF URBAN ENVIRONMENT

Abstract: *The article presents the results of exploration of the influence of small architectural forms on the organization of public spaces in Krasnoyarsk - square, street territory. The process of improvement of the modern city includes a competent structural organization of the landscape and recreational areas. According to the laws of urban development, this factor stimulates the social activity that stimulates historical progress. Within the framework of the research of socio-cultural transformations forming place in the town-planning context the authors have researched ways of organizing recreational areas, the specifics of design of open urban spaces. Small architectural forms are one of the main elements of landscape forming. Their self-sufficiency and relevance is confirmed by the presence of the territory of realization, application in the process of society's life. They are used in the creation of chamber spaces. This is due to the ability of small architectural forms to create chamber, cozy spaces. Volumetric-spatial compositions with their participation are regularly used on city squares for the purpose of organizing playgrounds, places of socially significant events. The already established tradition has a historical context that allows us to analyze the transformation of the ideological state of society. The change in the nature of the celebrations is directly related to their cause. This affects the ergonomic, large-scale structural organization of recreational areas. It is necessary to note the influence of scientific and technical progress, which influenced the way of realization of small architectural forms. By the results of the transformation of functions and forms of public spaces, one can judge about the change in the socio-cultural aspect of the architectural environment. It is expressed in the scale, artistic design of small architectural forms, seasonal game spaces. Morphological properties of public areas, organized with the participation of small architectural forms become an active form-building element of area. In the summer, part of the urban landscape is also sculptures, vertical landscaping. Flower compositions reflect the theme of the history of world art, filling the aesthetic and cultural-historical features of the urban environment. The phenomenology of architectural spaces of the microware with their participation becomes unique. Landscaped in this way, the territory is especially attractive for the residents of the city. Thus, small architectural forms actively participate in the transformation of significant areas of the city and show the socio-cultural trends of society. This can be expressed in an interactive, socially directed, multifunctional aspect of the formation of urban space. The revealed features of planning units can be used in the design of new landscaped areas.*

Keywords: *territory for leisure, transformation of public spaces, landscape improvement, spatial and spatial compositions.*

It is common knowledge that both cultural trends and cultural traditions distinguish a country or a nation. These traits create a unique cultural context for the country. This promotes artistic variety in the society. Russian culture just like any other contains traditions established in various art forms. Architecture is one of the most representative aspects of national creation. This article describes characteristics of decor in public areas, which takes inspiration from cultural values of Russian people. This article will also overview and analyze public areas of Krasnoyarsk. The results will be of use for landscape designers and city planners who aim to accentuate the originality of traditional Russian style in their planning of city public spaces. Art historians as well as sightseeing guides will also benefit from this work.

Art objects that have been topical for lengths of time for a broad audience become national culture attributes. A few paintings that can be picked as examples are “Morning in a Pine Forest” by Ivan Shishkin and “The Capture of Snow Town” by Vasily Surikov. Painting masterpieces become integrated into various other art forms and become representative aspects of Russian culture.

It should be noted that references to popular art pieces are made in design of public spaces in Krasnoyarsk. Small architectural forms carry on the cultural legacy and at the same time provide decor for socially important pieces. Socio-cultural importance of this is the creation of national character.

Living sculpture symbolizes close connection of human and natural resources, promotes environmental consciousness, and brings attention to preserving current pieces of organic architecture. Novelty of this object is characterized by transforming a well-known painting to a three-dimensional object in the city landscape. A painting masterpiece becomes a part of architectural environment. Socio-psychological importance of this object is manifested in dilution of emotional environment of the area. In the city plan this object is located in between two driveways in the middle of dwellings. Inhabitants of this area will especially appreciate the reminder of a natural life outside of the megalopolis in the middle of which they reside in. Humane environment promotes viewers-participants to perform humane acts, mainly being environmentally conscious. Adults will be reminded of their childhood, because they were familiarized with the original painting in the elementary school. Thus, this landscape object takes part in cultural and moral education of citizens. Its placement in the heavy traffic area makes the object well-known. It is the centerpiece of the garden square it is placed in. The outline of composition forms a triangle, which promotes high interest of the viewers in analysing the object (Fig. 5). Art is a term that sometimes makes people worried and ashamed of their ignorance. Often, viewers would have to learn new information to understand the idea behind an art piece the same way, the artist envisioned it. It is glorious when the artist’s intent is obvious. Character of this art object is simple. A viewer doesn’t need to try hard to see a bear-mother with her cubs. Artistic image raises attention to familiarity in the wild. Ecological importance of this object (in form of contribution to sanitary and hygienic environment) is manifested in it being a part of city’s greenery, which transforms carbon dioxide to oxygen. Altogether, aforementioned characteristics of the object make it not only important as an art piece, but also beneficial in other ways. Winter town is based on a traditional element of Maslenitsa celebration (Fig. 2). Pictured object, installed as a part of temporary landscape, promotes reminiscence for the traditional celebration. It is part of both cultural and moral context for the younger generations. The object also functions as a playground (for both children and adults), which promotes physical activity and, indirectly, healthy lifestyle in the citizens. Being a public space with a cultural context, the object promotes humane, positive mood in the society.

During analysis of characteristics of a complex of small architectural forms attention should be paid to their size limitations, which contributes to creation of a chamber-like, isolated, comfortable inner space.

Morphological aspect of city’s architecture, its constitutive part is called a morphotype. In this work it’ll be used to describe a category of architectural patterns, with similar outstanding morphology. This term is used to replace repeated use of “complex architectural system, often used for public leisure”. As such, playground, made of ice figures will also be called a morphotype during analysis.

The object is designed as a playground. Its morphotype designates a recreational area for play-type activities (Fig. 3). It’s location in the open air makes it publicly available. Activities in the open air are beneficial to those participating in them. Simplicity and usability of the object promote its use (Fig. 4). The object promotes physical activity in the populace, promotes a healthy lifestyle in them. An example should be made of how its ergonomics make it widely accessible for physical activity. Its structure is integral to its functions.

Visual concept of a game, limited by smaller dimensions of the morphotype, in relation to an average human's height, is aesthetically pleasing and promotes positive mood and leisure (Fig. 4). By observing children play it is possible to note small dimensions of their play areas. There is a connection between intuitive search for suitable isolated area in the children's game and dimensions of the observed morphotype. Limited height of the play area is important for leisure organization, since it creates a proper scale which provides both security and comfort.

Ubiquitously acknowledged tendency for growth of city agglomerations can be interpreted as a lack of comfort in the areas where average height of buildings is above a certain threshold. Administrative zones of a city, important in terms of city's economics, often cannot at the same time provide populace with needed comfort and visual contact.

Main achievement of cities is comfort. It is achieved through work of the city planning specialists, who create a friendly, humane, and caring environment. The main reason for discomfort from living in the cities is due to lack of parks, lack of leisure spaces, and drab, monotone building style. On the contrary, when a person sees that everything has been made to provide comfort for both their life and work, they stop being irritated by downsides of city-dwelling. They start enjoy their environment. They lose a desire to destroy, vandalise public areas, overall crime rate goes down. The most valuable achievement an architect or a city planner might get is when people start caring about their environment, when their door stops being a boundary between their zone of comfort and responsibility. It shows that the creator, through their work, contributed to moral and cultural progress in the society, which is rightfully valued by them.

Which methods of cityscaping can an architect apply in their everyday work? Without access to dictatorial methods of organizing other people's life, they can provide them with specially maintained leisure areas, well-positioned art-objects (living sculptures, greenery, and installations). It helps to have properly-planned territories for both work and leisure. In this case attention should be paid to scale.

It should be noted, that the word "scale" has a number of meanings, and not all of them appeal to this context. First, there is a meaning that is used to describe the overall dimensions of the construction, and thus to divide it into several classes like small-scale construction and large-scale construction (Vergunov, 1991). Second, it is used to refer to proportion between a size of a detail in blueprint and the size of a detail in a constructed object. Lastly, the one important in the context of this work, is the difference in size of the object in question and a human observer. It is the meaning most closely related to the populace living around the object, interacting with it on a regular basis. It is referred to the perceived quality of the object, so called "personal involvement in a figurative dialog".

In the words of N.Ya. Kardo, "It is here where appears a valuable quality of expressiveness, or even artistry, which gives rise to imagery, symbolism, idea. In other words, simple tool of volume or space becomes an act of art — a product, which makes us emotionally excited, worried, flustered, touch the very nature of our souls. Scale is a way to give Architecture human traits".

The previous quote can be considered true, since scale (as in comparison of the building's size to the size of the observer) is crucial to populace's comfort in the architectural environment. In the cities that serve as economic centres, where working conditions should fulfill the populace's social needs, scale of the environment should be made an emphasis on.

The idea of expression through scale isn't new it has been used since the ancient times. In Ancient Greece, Egypt, Rome, it has been used to reach for artistic perfection, though the term "scale" itself (at least in Russian language) has gained use as recently as the methods of composition in architecture have been systemized, which happened after the point, when architecture has started to be regarded as its own art form. Said moment has happened during the Renaissance, when the concept of architectural design has been conceived. With the appearance of "Aesthetics", a work by German philosopher A. Baumgarten, a new field of

science has been developed, which studies organization of living environment, needed for satisfaction of human's needs. Philosopher I. Kant has also contributed to this field. It is due to study of aesthetics, the use of such words as "enlightened", "space", "utilitarian", "dramatic" in context of architecture has spread.

With time, the term has entered the vocabulary of architects. Many architectural analysts (both in Russia and abroad) have researched the scale's effects, both direct and hidden, on people. Some of the most prominent architects in this field are A. Burov, A. Tsires, B. Mikhaylov, N. Brunov, A. Ikonnikov, N. Kordo, L. Kirillova. In the modern times it is customary to rely less on scale, and more on newer styles of expression. It is particularly noticeable in the postmodern styles, where drastic changes have happened in regards to the architectural principles, developed with hellenic practices and natural architectonics, used prior in artistic shaping. "The lack of traditional pointers to scale impedes the recognition of massive architectural forms, oriented to a grey mass of people". Architecture and human's emotions are interconnected. Architecture has since lost its previously distinguishing informative value, which negatively impacts urban environments of modern cities. "Architecture always influences people, but most of the time this influence is subconscious".

The author of "Scale in Modern Architecture" D.L. Melodinsky agrees with the expression about the lost importance of scale in the modern architecture, "If in classical architecture the expression of scale has been formally articulated with different details, stemming from natural architectonics, clear imagery of body, crestings, base and metrical patterns of horizontal apertures, creating an inner guiding scale, whereas in the postmodern schools, they are mostly lost. They proclaim a new extramundane world, not suitable for the needs of the real people, which we really are. That is why they don't feel the need to condone to scales and proportions developed by classical architecture, based on the experience of human perception of architectural forms. An 'antigravitational' approach to perception is established. Modern cellular facades pay no attention to traditional visual experience of a human being, they disregard established and expected scale norms in favour of amazing gigantomania. If there are any pointers for scale, they are hard to notice". The reason for that is that newest technological advancements allow constructing taller and taller buildings, and it is just natural to want to taste the fruit of progress. "A contradiction is visible, though, between gigantism of the structures and a real human being. Environment becomes hostile to the human, because a human cannot relate to it anymore. Thus it becomes anti humane. On the contrary, the presence of scale is humane."

A large number of postmodern buildings have been constructed in the post-Soviet states. Krasnoyarsk is not an exception. It can be noted, how the lack of scale in the buildings is countered nowadays on a few selected examples.

Scale is one of the immutable properties of the classical architecture. It could be one of the architect's tools that give the most expression. Such scale pointers as lamp posts, sculptures, public services, smaller architectural forms, can all be used for a person to compare the size of a construction to their own size. Environment and lifestyle can change the person's mindset, which an architect should pay attention to. A visual ensemble of objects, incorporating the concept of scale can be used to communicate the feeling of comfort to people. "The beauty of the environment is a key component to solution of many of the architect's problems, it can fill a person with meaning and make them feel alive. It is why architects and other people, responsible for the visuals of the city, must strive to spread beauty."

K.S. Melnikov said, "Architecture is a game you play with your eyes. It brings a variety to your life when you see familiar images in the mass of cityscape. It is when your imagination awakens, your feelings and emotions become sharper, people smile more, relax more, stress less, become destructed from their oppression. Play of visual images stimulates brain activity and, according to research of V.A. Filin, is the fastest way to transfer information in the context of education. Perceived mass of an object in a landscape in the context of emotion and imagery increases the expressiveness and density of information in the environment. It adds a positive

feeling to building blocks by increasing the visual variety, which contrasts with often emotionally tense background”.

Smaller scale of the ensemble, comparable to a small living building, creates an aura of comfort, intimacy, which is required for leisure. For people who do city planning for a living, the information about organization of accessible public playgrounds will be of use. These objects contribute to variety of the public works, allow people to enjoy their leisure time together. Cooperative work, just like cooperative leisure, unites city-dwellers, makes our society humane, and promotes progress. Thus, architectures and city planners can contribute to the development of society.

The analysis of city planning decisions in Krasnoyarsk has helped to identify the most productive methods of organization of a city life, comfortable for humans. The results will allow avoiding common mistakes in the city planning area, which negatively affect the mental state of city-dwellers. When working with the cityscape environment it is important to also pay attention to aesthetics, make use of small architectural forms for leisure spots, which would be both entertaining and safe.

The analysis of design of landscape objects has allowed tracing the integration of national art masterpieces into the city environment. The traces are manifested in various references to elements of Russian folklore and traditional Russian culture, which may be interpreted as a proof other arts’ influence on architecture. The references preserve distinguishing traits of traditional art pieces by adapting them to a form of three-dimensional art objects. Modern approaches to incorporating images from both historical and cultural backgrounds allows for a specific style of designing city’s public spaces. Such an approach allows awakening a relationship between a person and the Russian culture. The result of this analysis can be used as a theoretical basis and for designers, whereas the overview could be a used as a cheat sheet for sightseeing guides in Krasnoyarsk.



Figure 1



Figure 2

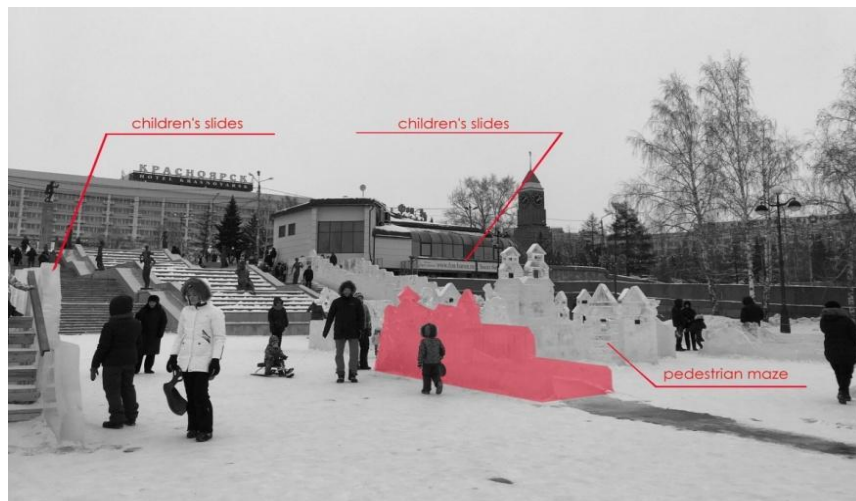


Figure 3



Figure 4

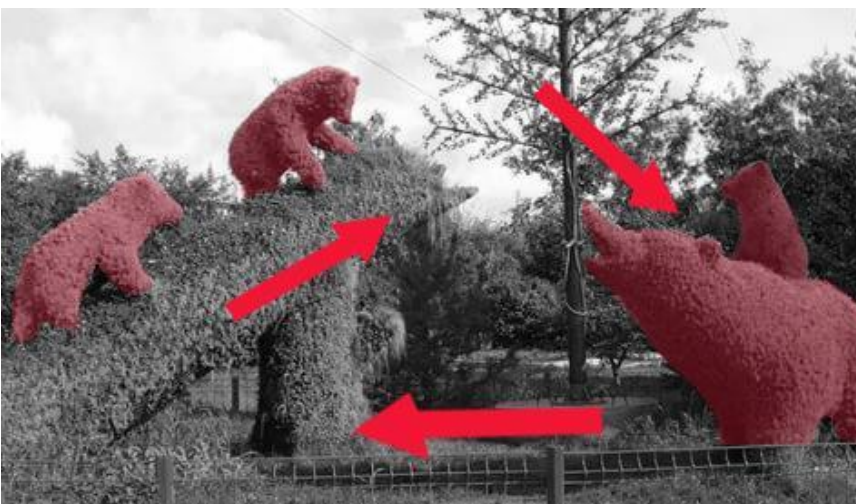


Figure 5

References

1. Vergunov, A.P. (1991). *'Landscape Design'* (Moscow: High School).
2. Melodinsky, D.L. (2015). 'Architectural Scale as a System', *Architecton: News of High Schools. Theory of Architecture*, 49.
3. Krinsky, V.F. (2012). *'Volume-Spatial Composition in Architecture: monograph'* (Moscow: Architecture).